



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,793	07/31/2003	Chun-Seung Yang	45358	7877

7590 04/07/2005

Christian C. Michel  
Roylance, Abrams, Berdo & Goodman, L.L.P.  
Suite 600  
1300 19th Street, N.W.  
Washington, DC 20036

EXAMINER
----------

MORRISON, THOMAS A

ART UNIT	PAPER NUMBER
----------	--------------

3653

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/630,793

Applicant(s)

YANG, CHUN-SEUNG

Examiner

Thomas A. Morrison

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Korea on January 13, 2003. It is noted, however, that applicant has not filed a certified copy of the prior foreign application as required by 35 U.S.C. 119(b).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9 recites the limitation "the groove" in line 2. There is insufficient antecedent basis for this limitation in the claim.

3. Claim 14 recites the limitation "the idle roller rotation shaft" in line 5. Also, claim 14 recites the limitation "the idle roller rotation shaft holder" in line 7. There is insufficient antecedent basis for these limitations in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-8, 10-11 and 14, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al. In particular, Johnson et al. discloses all of the limitations of claims 1, 3-8, 10-11 and 14.

Regarding claim 1, Figs. 1-4 show a paper registration apparatus including  
a lower guide plate (12) supporting the sheet of paper thereon and having a  
groove (18) formed at one side;

a side wall guide (38) vertically installed at the side of the groove (18) of the  
lower guide plate (12) parallel to a direction of a paper transfer route to perform a side  
registration of the sheet of paper;

a duplex transfer roller (42) installed perpendicular to the direction of the paper  
transfer route;

an idle roller (62) installed above the duplex transfer roller (42) at a  
predetermined inclination angle with respect to the duplex transfer roller (42);

an idle roller rotation shaft holder (58) rotatably supporting both ends of a rotation  
shaft (60) of the idle roller (62);

a pressing unit (including 69) providing an elastic force to the idle roller (62)  
toward the duplex transfer roller (42); and

a pivot unit (including 64 and 68) adapted to set the inclination angle of the idle  
roller (62) within a predetermined range according to a type of the paper. With regard  
to the recitation, " for a duplex printer which performs side registration of a sheet of  
paper before the sheet of paper is transferred toward a feed roller to print an image on  
a rear side of the sheet of paper after a front side of the sheet of paper is printed", this  
is merely a statement of intended use. As such, Johnson et al. meets all of the  
limitations of claim 1.

Regarding claim 3, column 3, lines 34-45 disclose a range of the inclination angle is substantially between 4 degrees and 9 degrees.

Regarding claim 4, column 3, lines 34-45 disclose a range of the inclination angle is substantially between 5 degrees and 8 degrees.

Regarding claim 5, Fig. 3 shows that the pivot unit (including 68) has an elastic member (68) elastically supporting one side of the idle roller rotation shaft holder (58); an arm (including 64 and 66) extending horizontally from the idle roller rotation shaft holder (58) in a direction perpendicular to the idle roller rotation shaft (60); and a confining unit (including 67) confining a pivot range of the arm (including 64 and 66).

Regarding claim 6, Fig. 3 shows that the confining unit (including 67) is a stopper where a slot (i.e., slot through 86 and into 67) is formed to confine a horizontal space in which the arm (including 64 and 66) is inserted and pivots.

Regarding claim 7, Fig. 3 shows that the pressing unit (including 69) has a circular column member (52) extending upward from an upper center portion of the idle roller rotation shaft (60) to be rotatably supported in a printer body (typewriter explained in Abstract); and

a spring (69) installed around an outer circumference of the circular column member (52) to press the idle roller rotation shaft holder (58) and the idle roller (62) toward the transfer roller (42), wherein the circular column member (52) is a center shaft of the rotation of the idle roller (62).

Regarding claim 8, Figs. 1-4 show a paper registration apparatus for a printer which performs side registration of a sheet of paper, the apparatus including an idle roller (62) installed above a transfer roller (42) at a predetermined inclination angle with respect to the transfer roller (42); and a pivot unit (including 68) adapted to set the inclination angle of the idle roller (62) within a predetermined range according to a type of the paper.

Regarding claim 10, column 3, lines 34-45 disclose that a range of the inclination angle is substantially between 4 degrees and 9 degrees.

Regarding claim 11, column 3, lines 34-45 disclose that a range of the inclination angle is substantially between 5 degrees and 8 degrees.

Regarding claim 14, Figs. 1-4 show a pressing unit (including 69) providing an elastic force to the idle roller (62) toward the transfer roller (42), and wherein the pressing unit further includes a circular column member (52) extending upward from an upper center portion of the idle roller rotation shaft (60) to be rotatably supported in a printer body (typewriter explained in Abstract); and

a spring (69) installed around an outer circumference of the circular column member (52) to press the idle roller rotation shaft holder (including 58) and the idle roller (62) toward the transfer roller (42), wherein the circular column member (52) is a center shaft of the rotation of the idle roller (62).

5. Claims 1, 2, 8 and 9, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Baskette et al. In particular, Baskette et al. discloses all of the limitations of claims 1, 2, 8 and 9.

Regarding claim 1, Figs. 1-8 show a paper registration apparatus including  
a lower guide plate (26) supporting the sheet of paper (24) thereon and having a  
groove (near 22) formed at one side;

a side wall guide (58) vertically installed at the side of the groove (near 22) of the  
lower guide plate (26) parallel to a direction of a paper transfer route to perform a side  
registration of the sheet of paper;

a duplex transfer roller (22) installed perpendicular to the direction of the paper  
transfer route;

an idle roller (16) installed above the duplex transfer roller (22) at a  
predetermined inclination angle with respect to the duplex transfer roller (22);

an idle roller rotation shaft holder (14) rotatably supporting both ends of a rotation  
shaft (18) of the idle roller (16);

a pressing unit (including 20) providing an elastic force to the idle roller (16)  
toward the duplex transfer roller (22); and

a pivot unit (including 34 and 80) adapted to set the inclination angle of the idle  
roller (62) within a predetermined range according to a type of the paper. As  
mentioned above, the recitation regarding the duplex printer is merely a statement of  
intended use. As such, Baskette et al. meets all of the limitations of claim 1.

Regarding claim 8, Figs. 1-8 show a paper registration apparatus for a printer  
(Abstract) which performs side registration of a sheet of paper, the apparatus including

an idle roller (16) installed above a transfer roller (22) at a predetermined  
inclination angle with respect to the transfer roller (22); and

a pivot unit (including 34 and 80) adapted to set the inclination angle of the idle roller (16) within a predetermined range according to a type of the paper.

Regarding claims 2 and 9, Fig. 2 shows an upper guide plate (12) having a groove (30 or groove in 21) formed at a position corresponding to the groove (near 22) of the lower guide plate (26) at a position above the lower guide plate (26).guide plate.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baskette et al. as applied to claim 9 above, and further in view of Johnson et al. Baskette et al. shows all of the limitations of claims 12 and 13, except for the elastic member of claim 12 and the slot of claim 13. Figs. 1-8 of Baskette et al. show a registration apparatus with a pivot unit having an idle roller rotation shaft (18) and an idle roller rotation shaft holder (14); an arm (including 34 and 90) extending horizontally from the idle roller rotation shaft holder (14) in a direction perpendicular to the idle roller rotation shaft (18); and a confining unit (including 96) confining a pivot range of the arm (including 34 and 90). Such confining unit (including 96) is a stopper, but Fig. 8 does not specifically show that the confining unit (including 96) has a slot as claimed.



Johnson et al., in Figs. 1-4 shows that it is well known to provide a registration apparatus with a pivoting unit (including 68) having an elastic member (68) that supports one side of an idle roller rotation shaft holder (including 58) via an arm portion (64). This elastic member maintains the axis (60) of an idle roller (62) perpendicular with a guide wall (38). See column 4, lines 28-30. Fig. 3 of Johnson et al. also shows that it is well known to provide a registration apparatus with a confining unit (including 67) having a slot (i.e., slot through 86 and into 67) that confines a horizontal space in which an arm (including 64 and 66) is inserted and pivots. Such slot guides the movement of the arm (including 64 and 66). It would have been obvious to one of ordinary skill in the art at the time of the invention, to provide the Baskette et al. registration apparatus with an elastic member to maintain the axis of the idle roller (16) of Baskette et al. perpendicular with the guide wall (58) of Baskette et al, as taught by Johnson et al. Also, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a slot in the confining unit (including 96) of Baskette et al. to guide the movement of the arm of Baskette et al., as taught by Johnson et al.


### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is 703-305-0554. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 703-306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3653

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DONALD Z. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNICAL CENTER 3653